AIR, NOISE AND VIBRATION MONTHLY MONITORING REPORT
Number 011

Prepared By:
Gramercy
Group Inc.

DDC. Project ID:	BBJ M DSS	**Period Start:** 6/01/23 **End** 6/30/23
Project Name:	NYC Borough Based Jails System – Manhattan Dismantle and Swing Space	
DDC Pin No.:	8502021CR0004P-06P	

1) Community Air Monitoring Monthly Status Summary

TWA – Time Weighted Average
ug/m^3- micrograms per cubic meter

Number of Workdays in a Month	Number of Air Monitoring Days in a Month	Number of Days with Dust Concentrations above Action Concentrations by Month (100 ug/m^3 15 minute TWA)	Comments
22	30	3	No exceedances caused by construction activities were noted. The 3 alerts for the month of June were due to the extremely bad air quality caused by the Canada fires. Air monitoring was continued throughout every day of the month even on weekends when no work was being performed.

Community Air Monitoring Excursions and Corrective Actions

Action Concentration =100 ug/m^3 15 minute TWA above background concentration
Stop Work Concentration = 150 ug/m^3 15 minute TWA above background concentration

Date: Time	Maximum Dust Reading Before Corrective Action 15 Minute TWA (ug/m^3)	Maximum Dust Reading After Corrective Action 15 Minute TWA (ug/m^3)	Corrective Action
6/7/23 @ all day	177.879	10.294	No corrective action at this time as this was caused by forest fires in Canada and there was no action we could have taken to remediate the air quality. After the smoke cleared the dust readings went down to a safe level.
6/8/23 @ all day	142.52	10.294	No corrective action at this time as this was caused by forest fires in Canada and there was no action we could have taken to remediate the air quality. After the smoke cleared the dust readings went down to a safe level.
6/30/23 @ all day	151.06	14.786	No corrective action at this time as this was caused by forest fires in Canada and there was no action we could have taken to remediate the air quality. After the smoke cleared the dust readings went down to a safe level.

Narrative Summary of Air Monitoring, Excursions and Corrective Actions:

In June 2023, construction-related levels of Particulate Matter (PM) PM10 did not surpass Daily Permissible Exposure Limits (PEL) as set by federal standards for the 24-hour Time Weighted Average (TWA), or daily value, and did not cause air quality concerns to the public or on-site workers. Although data shows us having 3 days with levels above the alert threshold, this was not caused by construction and was the effect of the forest fires in Canada and that is out of our control to implement any mitigation techniques to remediate the issue.

The contractor, Gramercy Group Inc, in conjunction with the contractor's environmental specialist, has successfully implemented mitigation techniques at Action Level as well as Permissible Exposure Limits (15-Minute TWA) to suppress construction activity effects on air quality throughout the project work-zone.

2) Community Noise Monitoring Monthly Summary

Weighted decibels (dBA) level

Number of Workdays in a Month	Number of Noise Monitoring Days in a Month	Number of Days with Noise Levels above Action Levels by Month (dBA)	Comments
22	30	20	Noise monitoring was performed during 30 days in a month, including weekends. No exceedances related to construction activities were noted. There were 20 exceedances at AQS#998, located within our site positioned on Baxter Street. This monitor showed that the baseline noise for this street is well above the threshold naturally without any construction activity. The monitor is placed in a location where there is an abundance of noise created from community activity (traffic, horns, sirens, etc). We are still taking every alarm that we get from AQS #998 seriously, investigating the cause, and making sure it was not due to construction procedures and operations. We are removing this monitor and

			placing a new one across the street from the construction site on Baxter Street to get more accurate noise levels that are been generated outside of the site fence.

Community Noise Monitoring Excursions and Corrective Actions
Action Level = 80 dBA
Stop Work Level = 90 dBA

Date: Time	Maximum Noise Reading before Corrective Action (dBA)	Maximum Noise Reading after Corrective Action (dBA)	Corrective Action
6/4/23 @ 9:00am (SUNDAY NO WORK)	103.3 dBA	NA	No corrective action feasible as this noise is unrelated to construction activity.
6/8/23 @ 4:21pm (AFTER HOURS NO WORK)	108.8 dBA	NA	No corrective action feasible as this noise is unrelated to construction activity.
6/11/23 @ 4:00pm (SUNDAY NO WORK)	104.5 dBA	N/A	No corrective action feasible as this noise is unrelated to construction activity.
6/12/23 @ 5:00am (BEFORE HOURS NO WORK)	100.5 dBA	N/A	No corrective action feasible as this noise is unrelated to construction activity.
6/14/23 @ 11:00am	103.4 dBA	76.4 dBA	Spoke with our operator and had him be more careful when loading debris into dumpster positioned directly next to this monitor. Work stopped when noise reached the stop work level of 90dBA.
6/15/23 @ 11:21am	99.1 dBA	73.3 dBA	Spoke with our operator and had him be more careful when loading debris into dumpster positioned directly next to this monitor. Work stopped when noise reached the stop work level of 90dBA.
6/30/23 @ 7:40am	104.4 dBA	79.9 dBA	Spoke with our operator and had him be more careful when loading debris into dumpster positioned directly next to this monitor. Work stopped when noise reached the stop work level of 90dBA.

Narrative Summary of Noise Monitoring, Excursions and Corrective Actions:

During the month of June, we experienced noise levels greater than the alert threshold AQS monitor #998 as we did in the month of May. After investigation of the cause of these spikes in noise in this area it was noted that all these alerts were not all caused by construction activity. This monitor is located within our site fence on Baxter Street. Unfortunately, this area has a ton of traffic throughout the day including police sirens and horns from cars. It was found that the alerts were from sirens from emergency service vehicles. We had a couple days where we were loading debris into dumpsters directly next to the monitor and were able to determine we were adding to the already naturally noisy area. We immediately acted and spoke to our operators and let them know to be cautious when dumping debris into the dumpsters. The noise level went down as a result of this but still shot back up to above threshold later in the day due to community noise. As stated, every time we get an alert for this monitor, we make sure to go investigate and confirm that the alarm was not set off by any of our ongoing construction activities. You will see examples below of weekend noise exceedances during non-working hours along with noise levels from after working hours during the work week to show that this area is exceeding noise levels while ZERO construction activity is being performed. Above are the most notable exceedances that were immediately investigated and found to be unrelated to our work along with the couple that we had to take corrective action on. All construction-related activities for the month of June stayed below the warning limit of 80 dBA after corrective actions.

3) Community Vibration Monitoring Monthly Summary

Inches per second (in/sec)

Number of Workdays in a Month	Number of Vibration Monitoring Days in a Month	Number of Days with Vibration Levels above Action Levels by Month (in/sec)	Comments
22	30	3	Vibration monitoring continued throughout the month and three exceedance events were recorded as shown below. All Vibration alerts were acted on immediately.

Community Vibration Monitoring Excursions and Corrective Actions

Action Level = 0.5 in/sec
Stop Work Level = 1.0 in/sec

Date: Time	Maximum Vibration Level before Corrective Action (in/sec)	Maximum Vibration Level after Corrective Action (in/sec)	Corrective Action
6/2/23 @ 8:30am (R04) 6/2/23 @ 2:54pm (R06)	0.503 (in/sec) R04 0.703 (in/sec) R06	0.008 (in/sec) R04 0.004 (in/sec0 R06	We stopped using the excavator with the muncher attachment to demo in this area and started using hand tools to demo to assure no vibration levels exceeded in this area.
6/5/23 @ 7:40am (R06)	0.917 (in/sec) R06	0.004 (in/sec) R06	We stopped using the excavator with the

			muncher attachment to demo in this area and started using hand tools to demo to assure no vibration levels exceeded in this area
6/12/23 @ 8am (R05)	0.520 (in/sec) R05	0.003 (in/sec) R05	We stopped using the excavator with the muncher attachment to demo in this area and started using hand tools to demo to assure no vibration levels exceeded in this area

Narrative Summary of Vibration Monitoring, Excursions and Corrective Actions:

During the Month of June 2023, there were 4 vibration monitor exceedances 2 on the same day. When we got these alerts, they were investigated immediately. We took corrective action as stated above and the vibration levels went down to almost nothing. After corrective action, all monitors showed results of vibration being under the warning limit of 0.5(in/sec) / stop work limit of 1.0(in/sec), so there was no need for corrective action at this time. I also want to acknowledge Vibration Monitor R14 located in the CJA Intake area that goes off multiple times every month due to all the foot traffic in this space and people physically hitting into the monitor. We still investigate this every time it happens, and we continue to remind the personnel in this area to be mindful of the monitor. None of the exceedances from R14 are related to construction activity.

ATTACHMENTS:

1 – Include one map of monitoring station/locations

2 – Include Data Plots

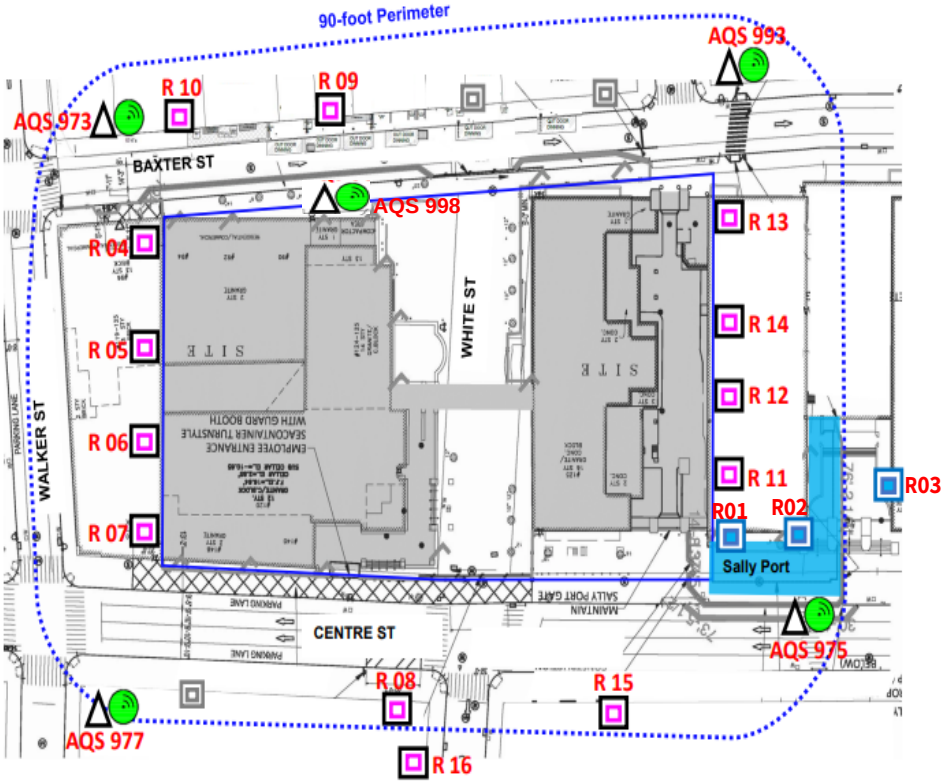
3 – Include Baseline Reference

Map of Monitoring Locations:

Vibration Monitors R01 – R16

Air Quality System (AQS) # 933, 973, 975, 977, & 998.

Environmental Monitoring Manhattan



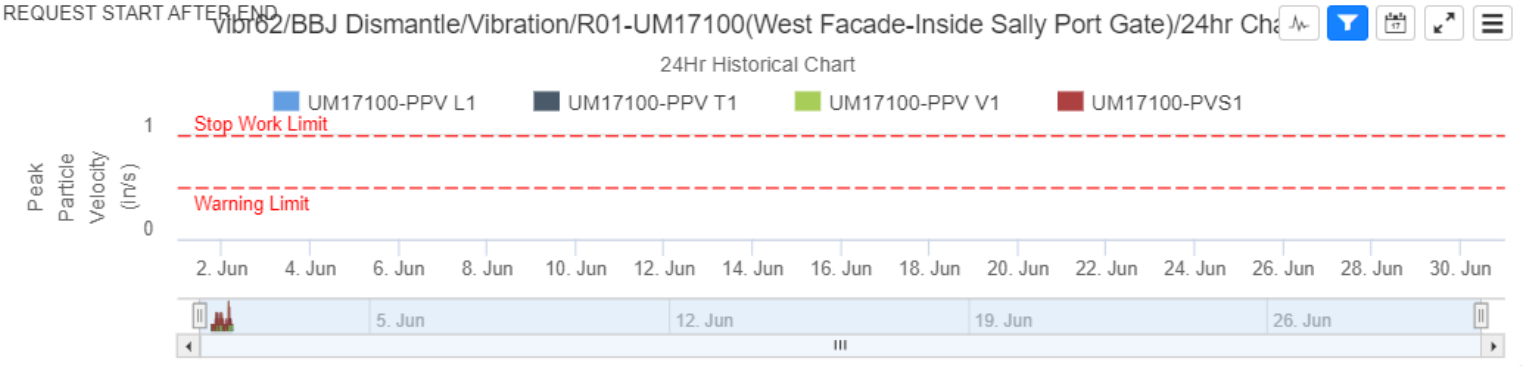
* Dismantle project vibration, air and noise monitoring devices are installed by Design-Build team in Phase 2, after sally port construction. A vibration monitoring station was installed in the DCTV Fire house at 87 Lafayette St.

* The location of monitoring stations presented is referential. Air/Noise Monitoring station located in Sally Port area will be relocated in Phase 2.

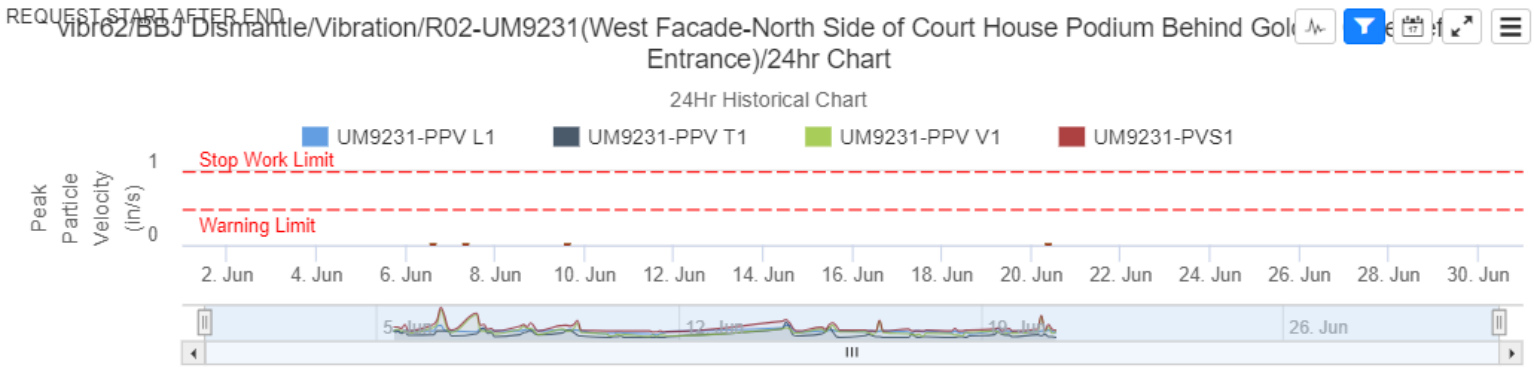
- Vibration Monitoring Dismantle
- Air Monitoring Station Dismantle
- Noise Monitoring Station Dismantle
- **Vibration Monitoring Sallyport construction (Installed)**
- Vibration Monitoring Not installed

1

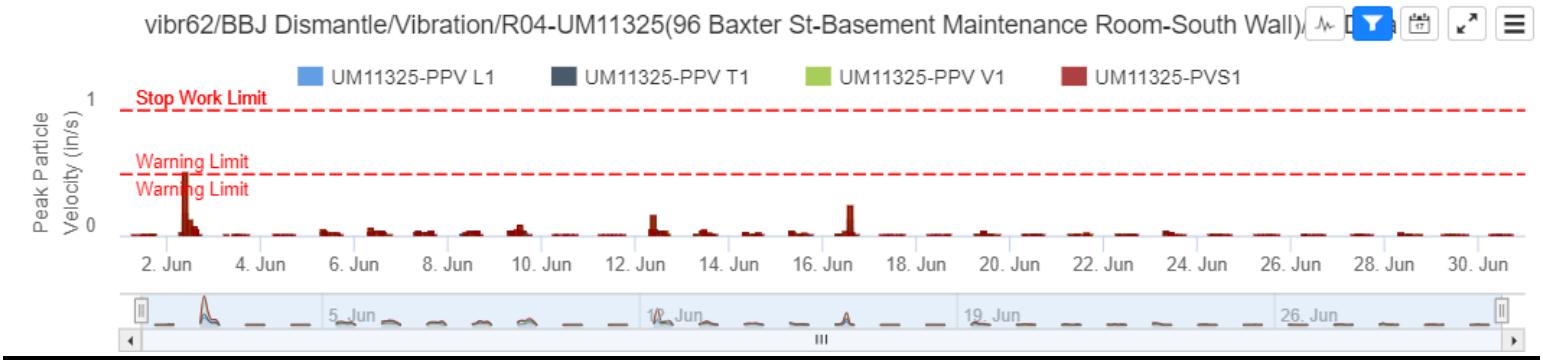
Vibration Monitor – (R01) June 23:



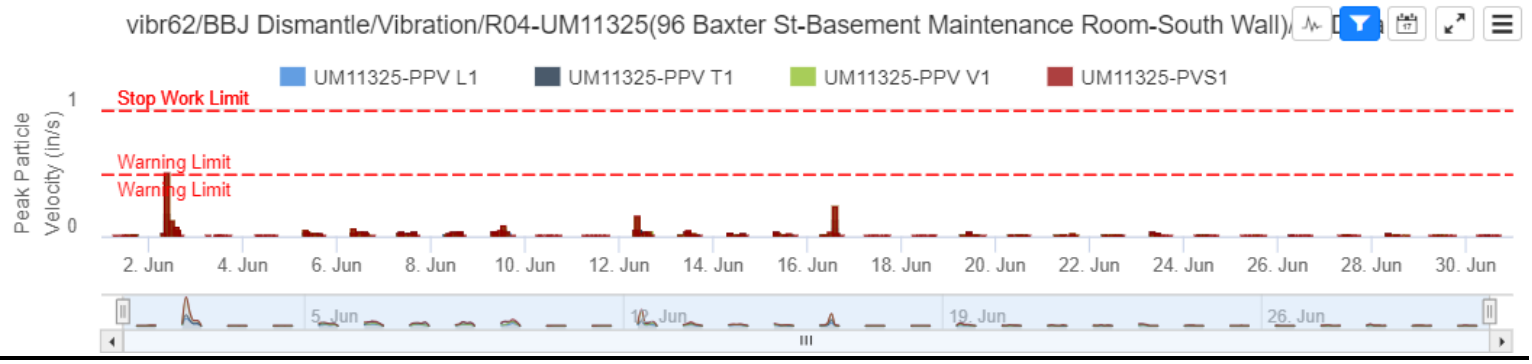
Vibration Monitor – (R02) June 23:



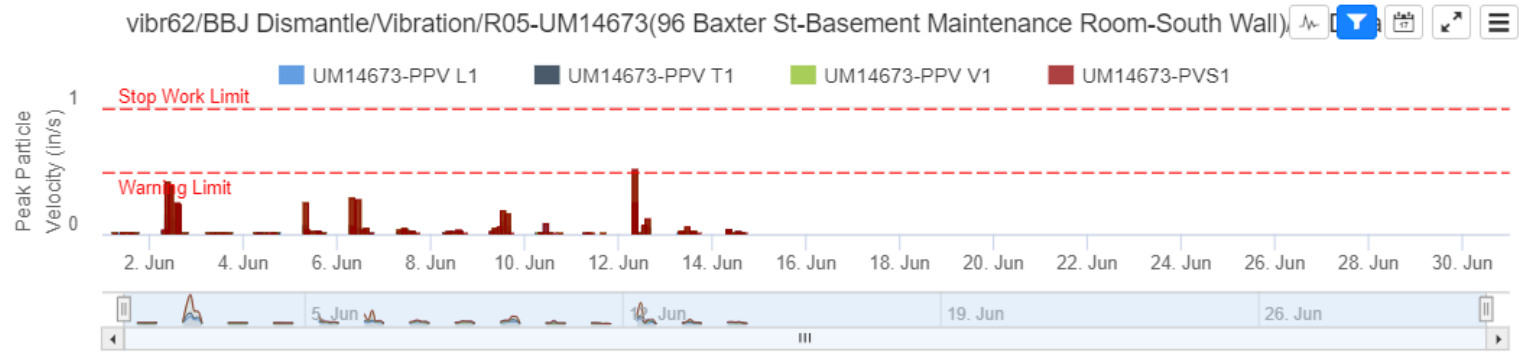
Vibration Monitor – (R03) May 23:



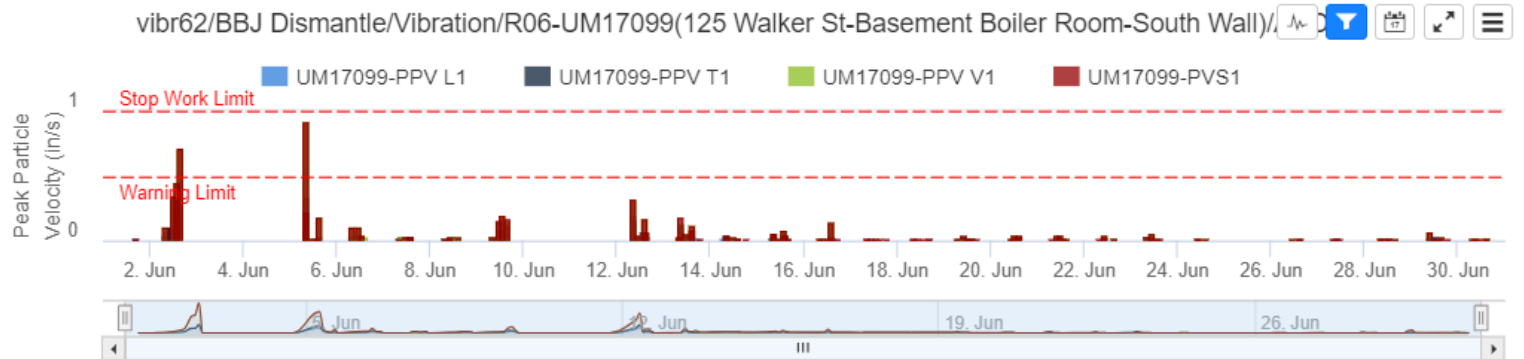
Vibration Monitor – (R04) June 23:



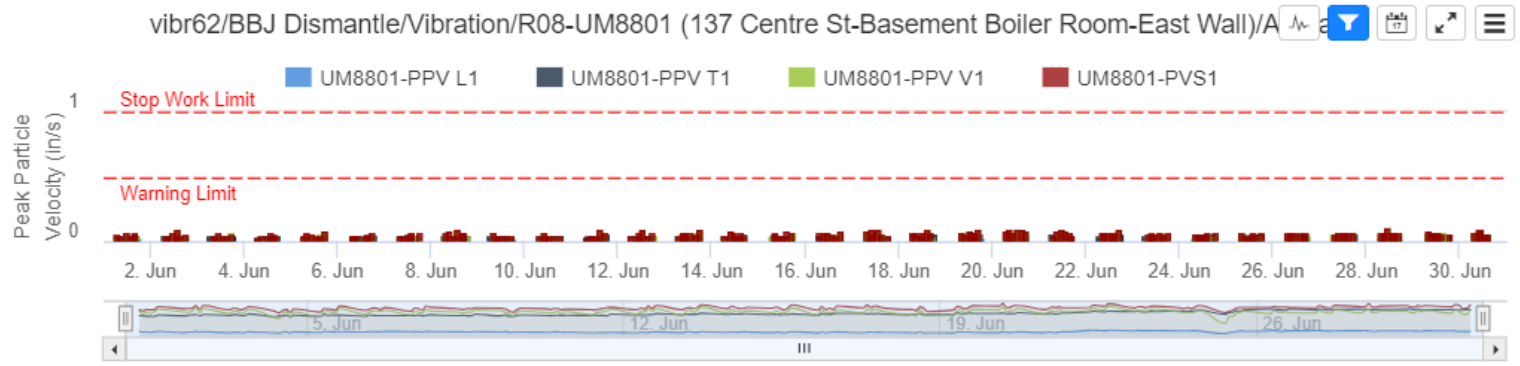
Vibration Monitor – (R05) June 23:



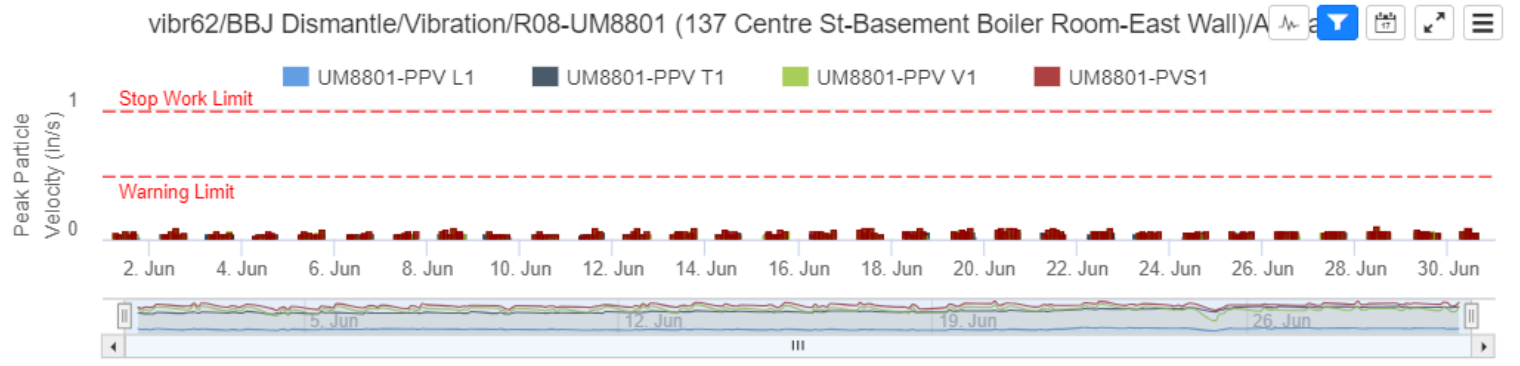
Vibration Monitor – (R06) June 23:



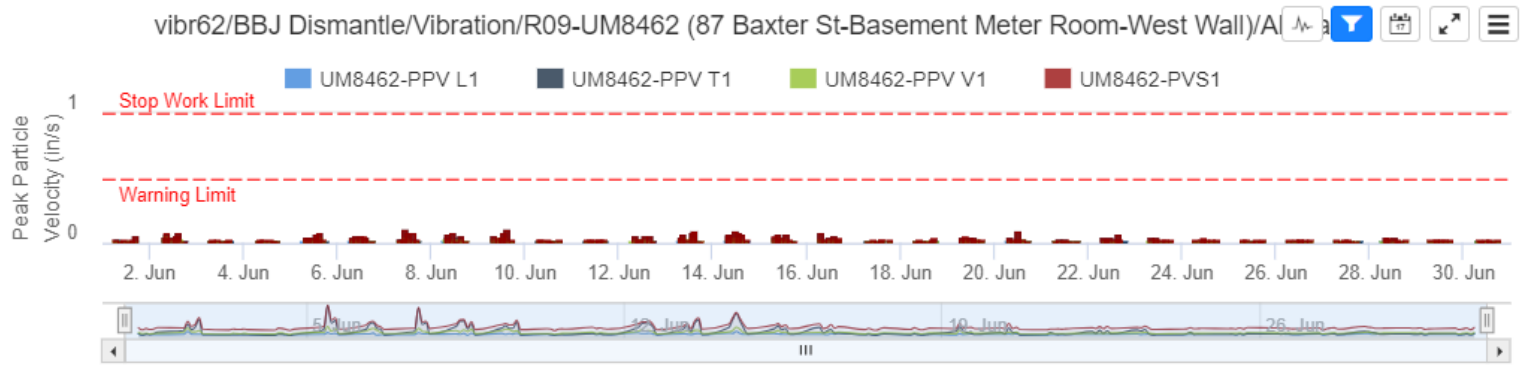
Vibration Monitor – (R07) June 23:



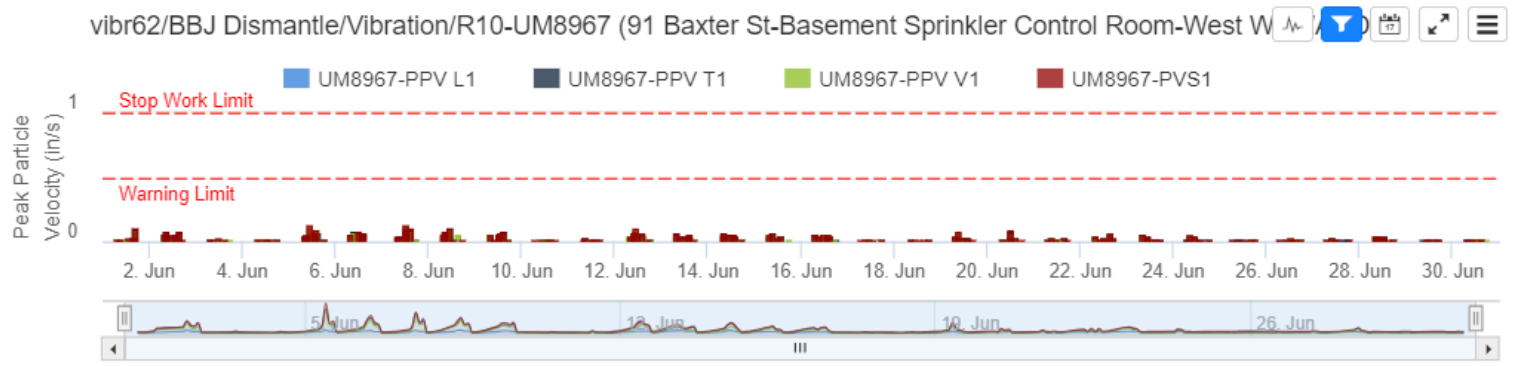
Vibration Monitor – (R08) June 23:



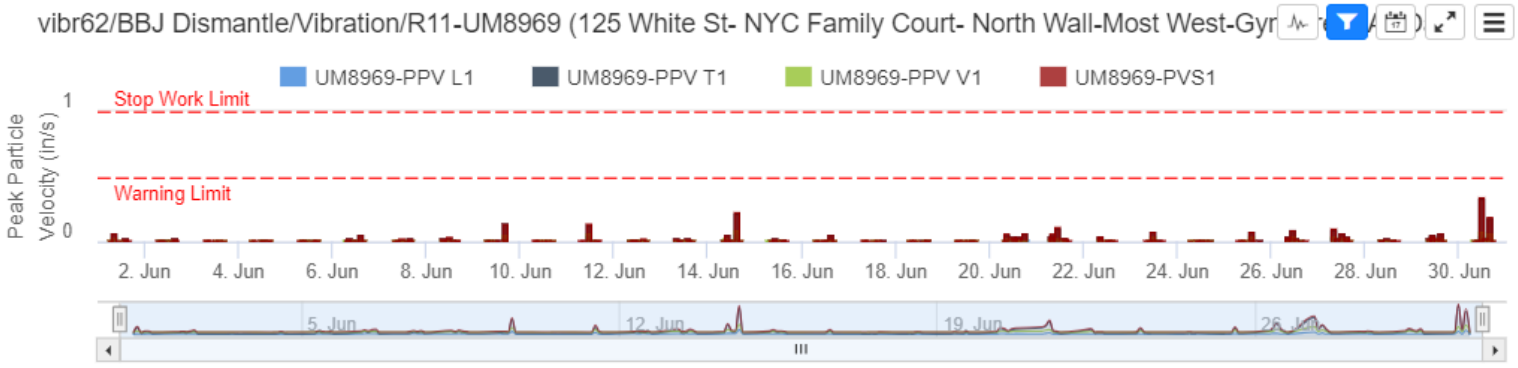
Vibration Monitor – (R09) June 23:



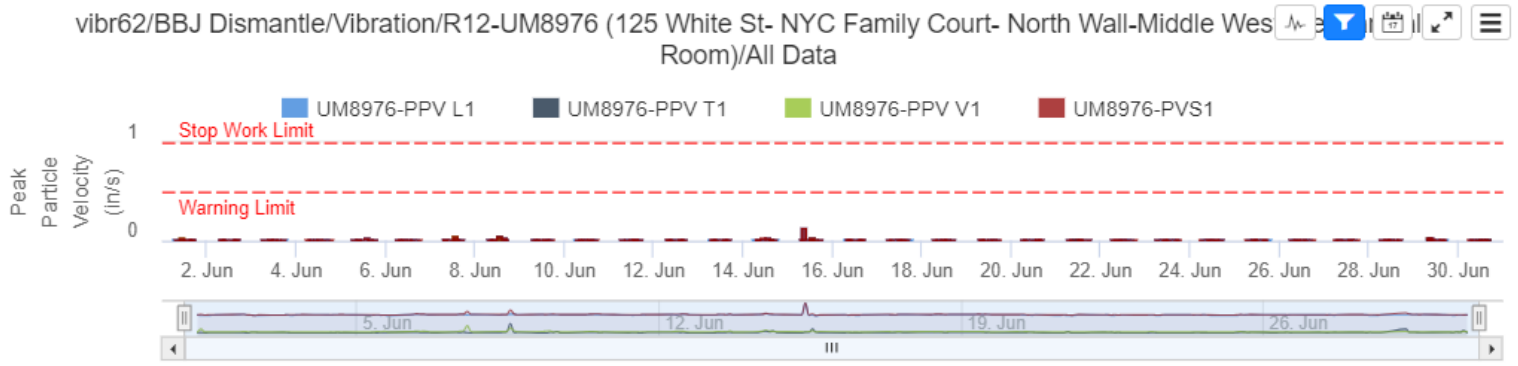
Vibration Monitor – (R10) June 23:



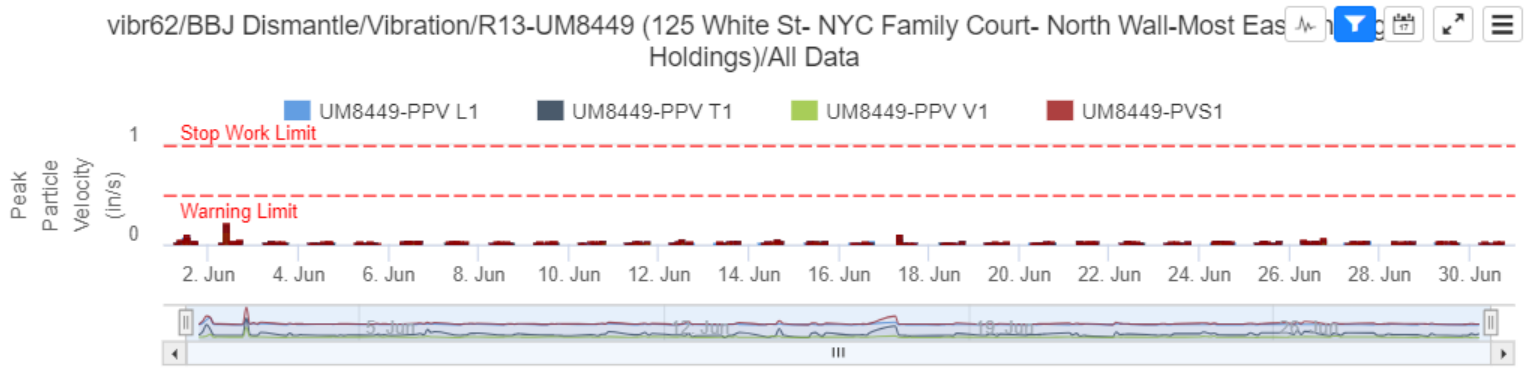
Vibration Monitor – (R11) June 23:



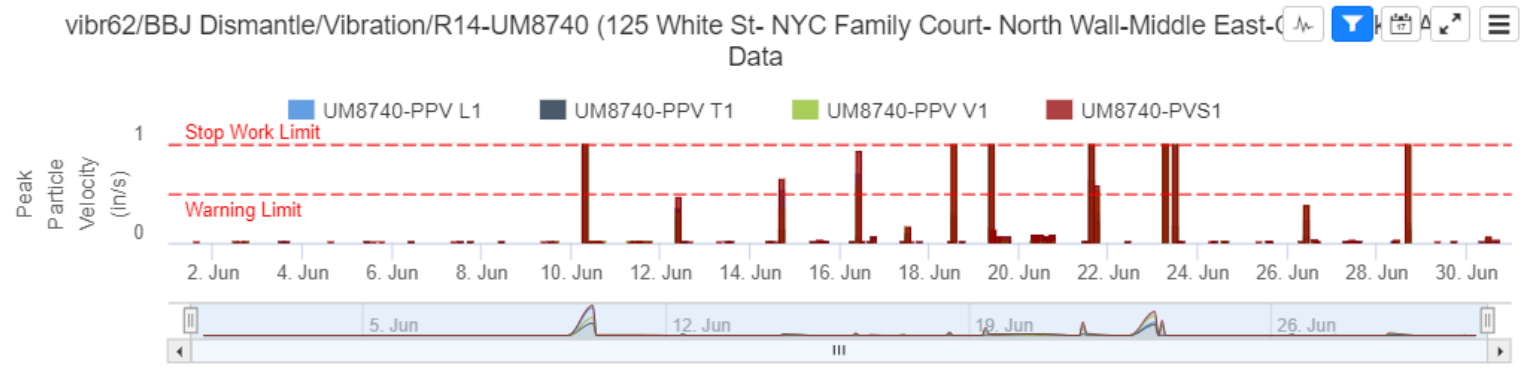
Vibration Monitor – (R12) June 23:



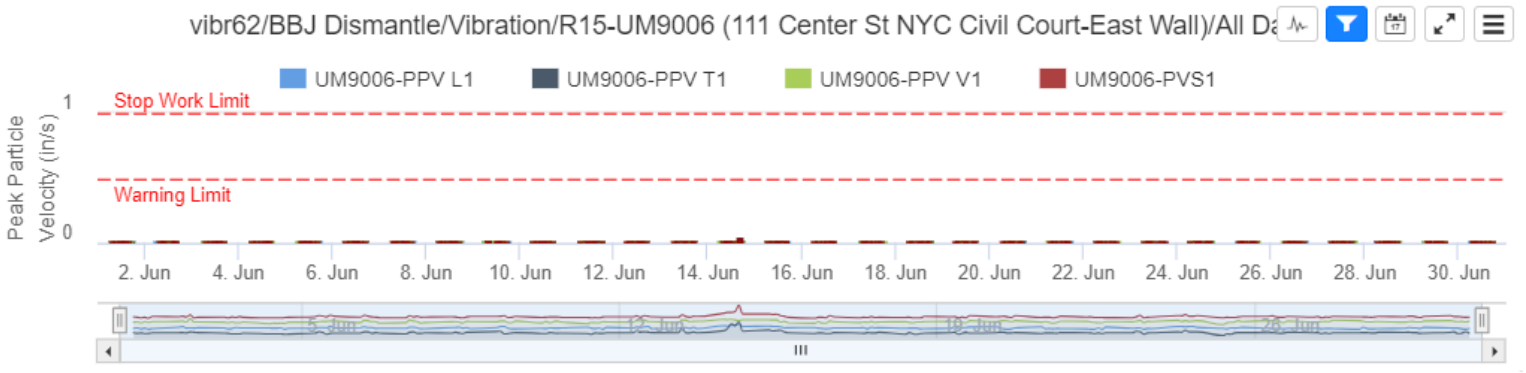
Vibration Monitor – (R13) June 23:



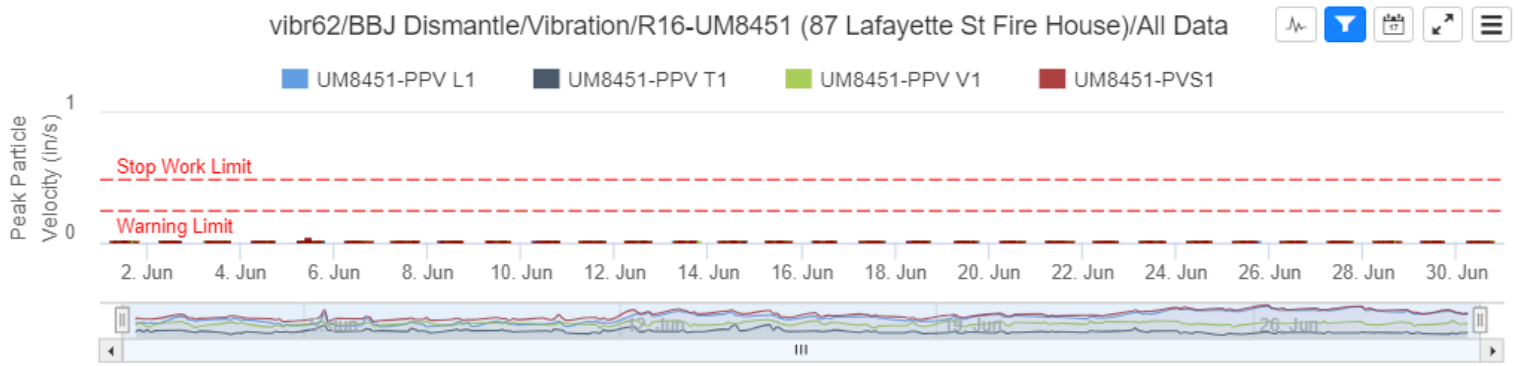
Vibration Monitor – (R14) June 23:



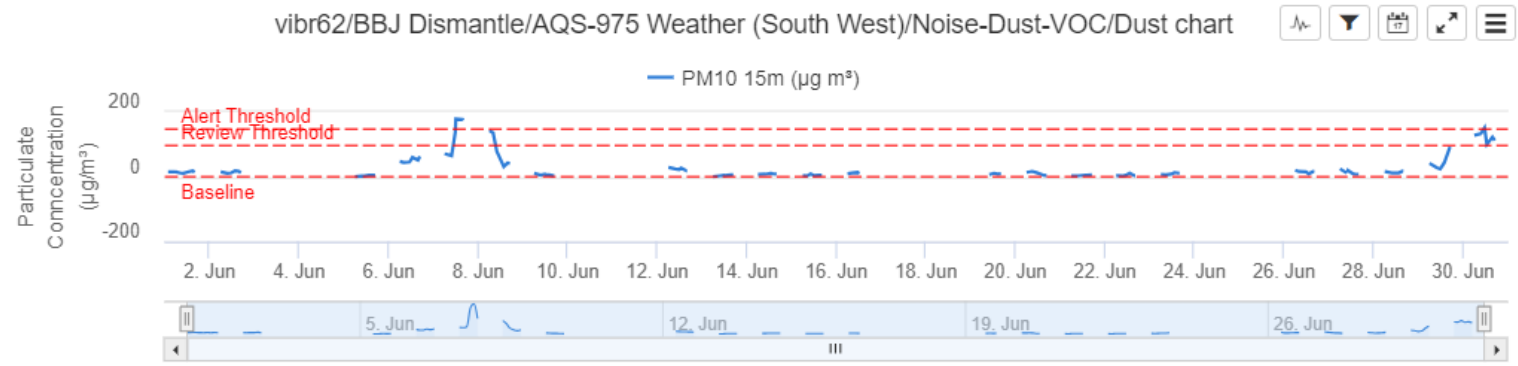
Vibration Monitor – (R15) June 23:



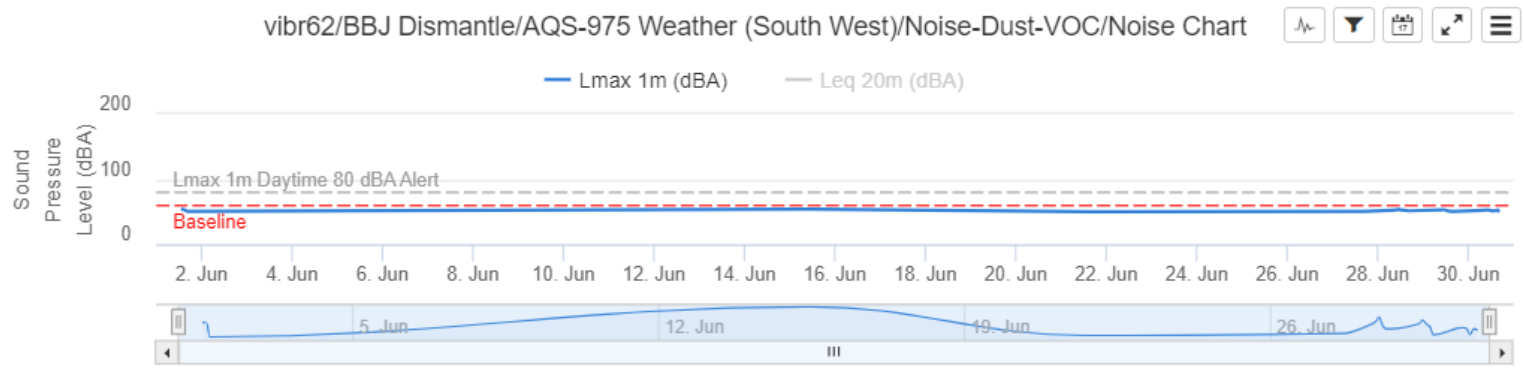
Vibration Monitor – (R16) June 23:



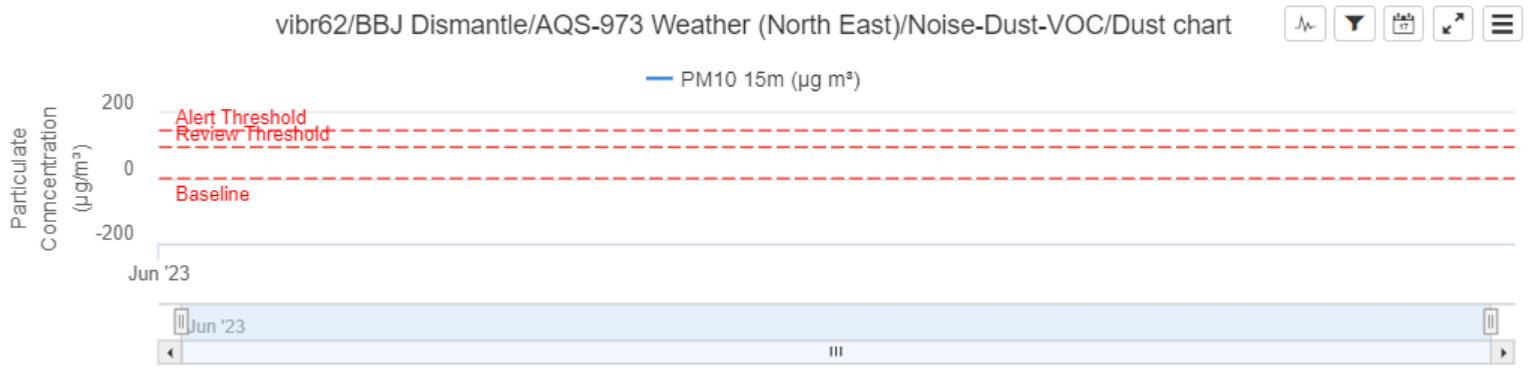
Air Quality Systems #975 – Dust Monitoring Station – June 23:



Air Quality Systems #975 – Noise Monitoring Station – June 23:



Air Quality Systems #973 – Dust Monitoring Station – June 23:



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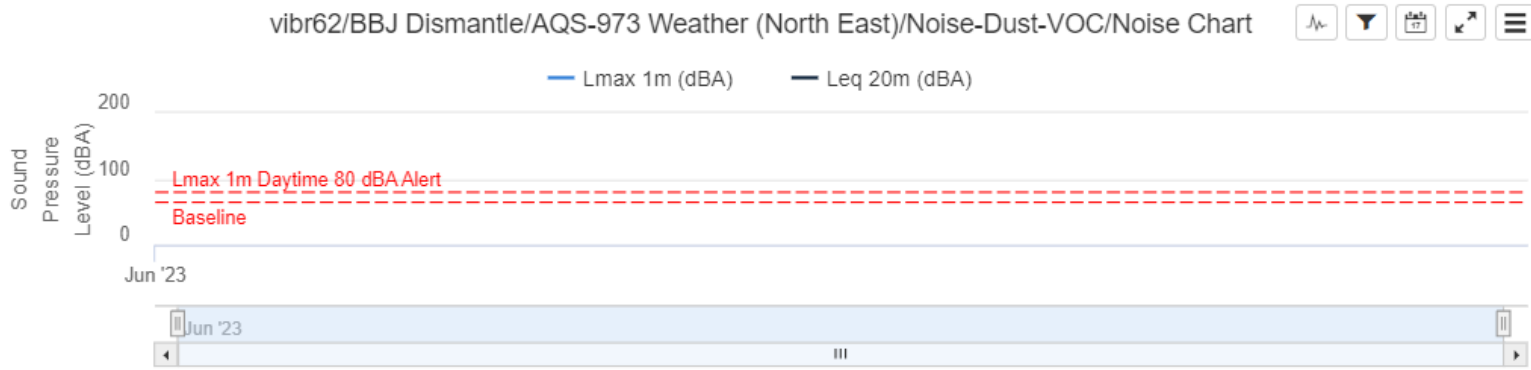
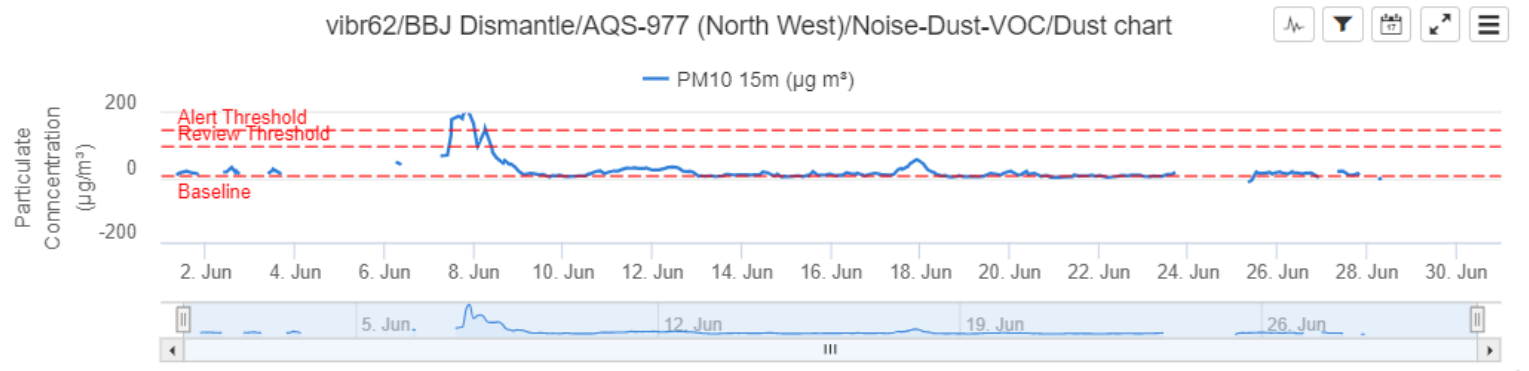


Air Quality Systems #977 – Dust Monitoring Station – June 23:



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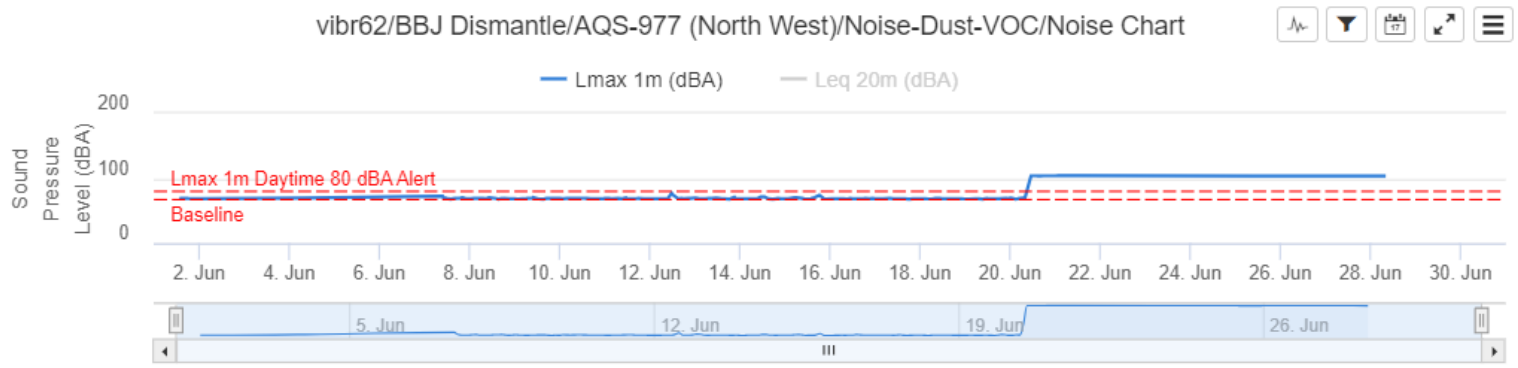
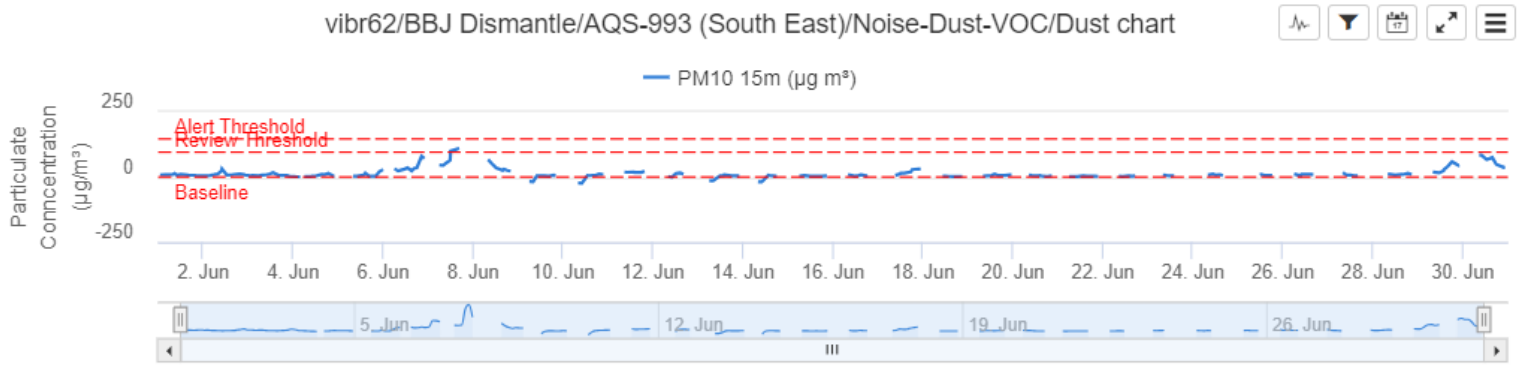


Air Quality Systems #993 – Dust Monitoring Station – June 23:



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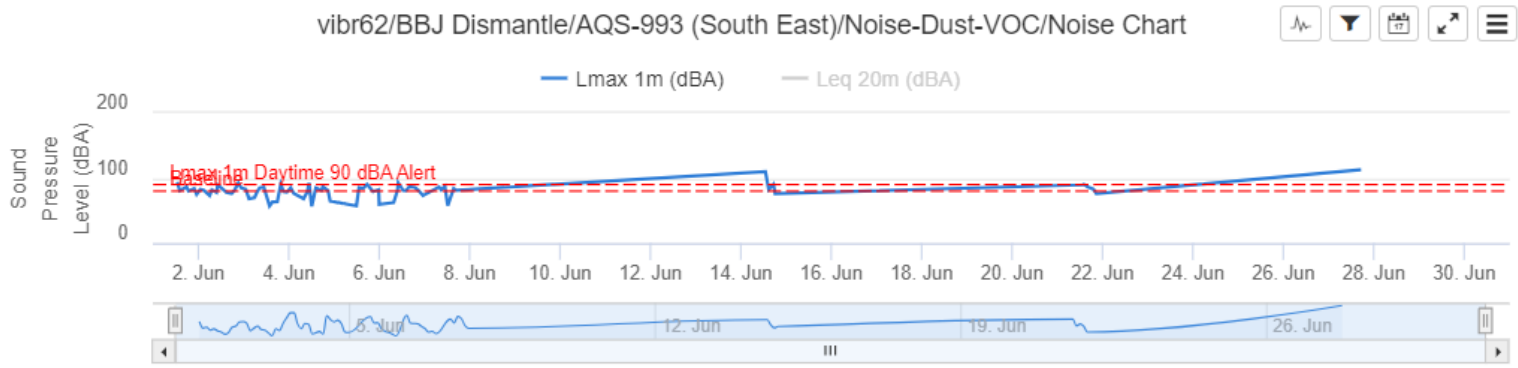
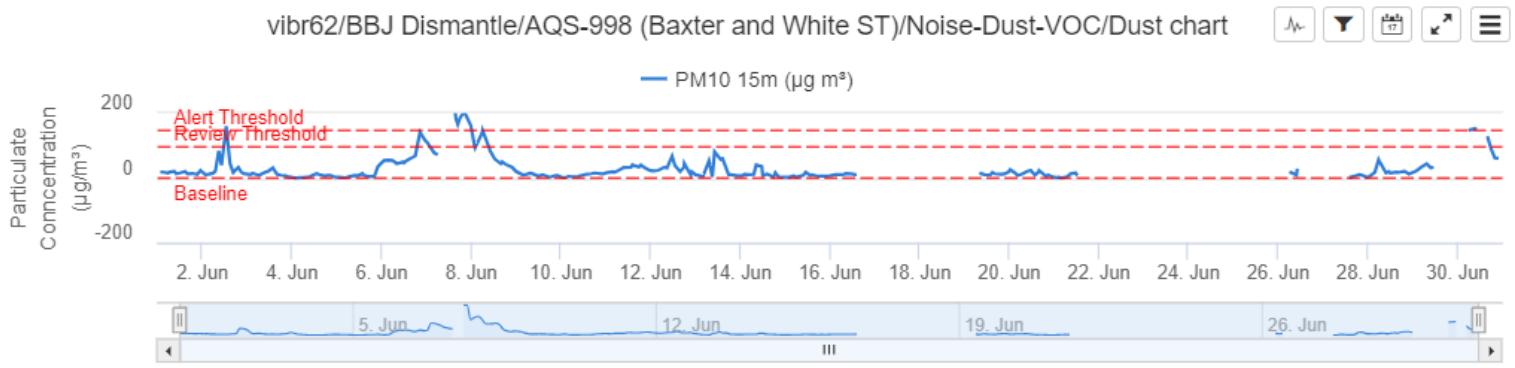


Air Quality Systems #998 – Dust Monitoring Station – June 23:



Air Quality Systems #998 – Noise Monitoring Station – June 23: